

Abstract of the Disclosure

A mass flow controller includes a thermal mass flow sensor in combination with a pressure sensor to provide a mass flow controller that is relatively insensitive to fluctuations in input pressure. The pressure sensor and thermal sensor respectively provide signals to an electronic controller indicating the measured inlet flow rate and the pressure within the dead volume. The electronic controller employs the measured pressure to compensate the measured inlet flow rate and to thereby produce a compensated measure of the outlet flow rate, which may be used to operate a mass flow controller control valve.